D1.2

Final version of Part C KPI webtool

Date 30.09.2024

Doc. Version 01

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

Work Package Title	WP1 – Project Management
Deliverable number	D1.2 – Final version of Part C KPI webtool
Description	Final definition of project's KPIs
Lead Beneficiary	Creara
Lead Authors	Gabriel García, Creara
Contributors	
Submitted by	Creara
Doc. Version (Revision number)	2
Sensitivity (Security):	Public
Date:	30/09/2024

Document Approver(s) and Reviewer(s):

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

Name	Role	Action	Date
Galina Ivanova	Project Board Member	*Approve*	*27/09/2024*
Vincenzo Bianco	Project Board Member	*Approve*	*27/09/2024*

Document history:

The Document Author is authorized to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling
- Clarification

To request a change to this document, contact the Document Author or Owner.
Changes to this document are summarized in the following table in reverse chronological order (latest version first).

Revision	Date	Created by	Short Description of Changes
01	27.09.2024	Creara – Gabriel García	1st draft created
02	27.09.2024	Europroject – Galina Ivanova	Review
03	27.09.2024	Creara – Gabriel García	2st draft created

Configuration Management: Document Location

The latest version of this controlled document is stored in Deliverables

Nature of the deliverable		
R	Report	
DEC	Websites, patents, filing, etc.	x
DEM	Demonstrator	
O	Other	

Dissemination level		
PU	Public	x
CO	Confidential, only for members of the consortium (including the Commission Services)	

ACKNOWLEDGMENT

This report forms part of the deliverables from the LIFE Low2HighDH project, which has received funding from the European Union's Programme for Environment and Climate Action (LIFE) under grant agreement No 101120865. The Community is not responsible for any use that might be made of the content of this publication.

More information on the project can be found at: https://www.low2highdh.eu/

Copyright

Disclaimer

The information presented here has been thoroughly researched and is believed to be accurate and correct. However, the authors cannot be held legally responsible for any errors. There are no warranties, expressed or implied, made with respect to the information provided. The authors will not be liable for any direct, indirect, special, incidental or consequential damages arising out of the use or inability to use the content of this publication

TABLE OF CONTENTS

Project Summary

Low2HighDH is a project funded by the Programme for Environment and Climate Action (LIFE), aimed at developing methodologies for integrating low-grade energy sources into high-temperature district heating networks. This collaborative initiative brings together 8 partners from 7 European countries, leveraging a wide range of expertise to deliver comprehensive technological and financial solutions for the effective incorporation of low-grade and waste heat sources into operational district heating systems.

Throughout its duration, the project will provide support to 30 high-temperature district heating sites located in Lithuania, Poland, and Slovakia. The primary objective is to facilitate the adoption of low-grade or waste heat technologies by showcasing their benefits and presenting investment plans in line with the "efficient district heating and cooling" standards set by the Energy Efficiency Directive, with a 10-year implementation horizon. As part of this support, the project will assist heating site owners and managers in launching and overseeing at least two requests for proposals (RFQs) to select suppliers for the integration of these technologies.

The project will explore various low-grade renewable energy sources, including solar thermal, low-temperature geothermal, and heat pumps—the latter being a key enabling technology. Since heat pumps are powered by electricity, they can harness renewable energy from sources such as wind and photovoltaics. Additionally, the project will generate and distribute capacity-building materials that can be utilized by other high-temperature district heating sites or relevant stakeholders, ensuring that knowledge and best practices are shared widely.

List of Acronyms and Abbreviations

Abbreviation	Definition
KPI	Key Performance Indicators

Introduction

This deliverable seeks to establish the definitive framework for the project's Key Performance Indicators (KPIs). The initial set of KPIs was outlined during the proposal phase of the Low2HighDH project, where the first calculations and estimations were conducted to provide a preliminary understanding of the metrics that would measure the success and performance of the project.

Since the start of the project, we have gained valuable insights and deeper understanding through several months of practical work and implementation. The purpose of this document is to confirm the KPIs that will be used going forward, ensuring that they are both relevant and accurately reflective of the project's technical and economic objectives.

The KPIs outlined here will serve as the basis for ongoing monitoring throughout the remaining phases of the project, providing a clear and structured means of evaluating performance, efficiency, and impact.

Final version of Part C KPI webtool

Table 1. KPIs extraction from LIFE Webtool.

#	KPI	Project End Value	5 Years Beyond the Project End Value
1	**Primary Energy Savings (GWh/year)**	**0**	**1050**
	Primary Energy Savings in Residential Buildings (GWh/year)	*0*	*682.5*
	Primary Energy Savings in Industry & Services (GWh/year)	*0*	*367.5*
2	**Final Energy Savings (GWh/year)**	**0**	**945**
	Primary Energy Savings in Residential Buildings (GWh/year)	*0*	*614.25*
	Primary Energy Savings in Industry & Services (GWh/year)	*0*	*330.75*
3	**Renewable Energy Generation (GWh/year)**	**0**	**945**
	Renewable Energy Generation in Residential Buildings (GWh/year)	*0*	*614.25*
	Renewable Energy Generation in Industry & Services (GWh/year)	*0*	*330.75*
4	**GHG Emissions (tCO_2eq/year)**	**0**	**291900**
	GHG Emissions in Residential Buildings (tCO_2eq/year)	*0*	*189735*
	GHG Emissions in Industry & Services (tCO_2eq/year)	*0*	*102165*
5	**Investment in Sustainable Energy (M€)**	**0**	**462.48**
	Investment in Sustainable Energy in Residential Buildings (M€)	*0*	*301.00*
	Investment in Sustainable Energy in Industry & Services (M€)	*0*	*161.48*
6	**Legislation & policy (N. Of documents)**	**48**	**15**
7	**Market Introduction (N. Of products/processes/methods)**	**2**	**0**
8	**Implementation Sites (N. Of Sites)**	**40**	**20**
9	**Skills (N. Of People Trained)**	**40**	**20**
10	**Communication (No. Of People)**	**247**	**324**
11	**Employment (No. Of FTE)**	**0**	**2312**

Conclusions

In conclusion, this deliverable presents the finalized set of Key Performance Indicators (KPIs) that will guide the ongoing evaluation of the Low2HighDH project.

These KPIs will serve as critical benchmarks, allowing us to monitor progress, assess the impact of the project's innovations, and ensure alignment with its overall objectives. As we move forward, these indicators will continue to play a central role in assessing the success and value of the project’s outcomes